

What Is Claimed Is:

1. A susceptor of an approximately round disk shape, having a concave wafer pocket on a front surface thereof for accommodating a wafer, comprising:

a gas supply channel passing through from a side surface or a rear surface of the susceptor to the wafer pocket; and

a gas discharge channel passing through from the wafer pocket to the side surface or the rear surface of the susceptor.

2. The susceptor according to claim 1, wherein

the gas supply channel has a shape adapted to supply a gas into the wafer pocket as the susceptor rotates; and

the gas discharge channel has a shape adapted to discharge the gas present in the wafer pocket as the susceptor rotates.

3. An epitaxial wafer production apparatus comprising:

a chamber having a gas supply vent and a gas discharge vent;

a susceptor of an approximately round disk shape, which is disposed inside the chamber and comprises a concave wafer pocket on the front surface thereof for accommodating a wafer, a gas supply channel passing through from a side surface or a rear surface to the wafer pocket, and a gas discharge channel passing through from the wafer pocket to the side surface or the rear surface;

support means for supporting the susceptor; and

heating means for heating the susceptor and the wafer inside the chamber.

4. The epitaxial wafer production apparatus according to claim 3, comprising a gas supply vent for supplying a carrier gas containing a raw material gas only above the susceptor located inside the chamber.

5. An epitaxial wafer production apparatus comprising:

a chamber;

a susceptor disposed inside the chamber and comprising a concave wafer pocket on a front surface thereof for accommodating a wafer;

support means for supporting the susceptor; and

heating means for heating the susceptor and the wafer inside the chamber, wherein the apparatus further comprises:

a gas supply vent for supplying a carrier gas containing a raw material gas to above the susceptor located inside the chamber; and

a heavy gas supply vent for supplying a gas which is heavier than the carrier gas to under the susceptor located inside the chamber.

6. A method for producing an epitaxial wafer, comprising the steps of:

placing a wafer into a concave wafer pocket formed on a front surface of a susceptor disposed inside a chamber;

supplying a gas from under the susceptor into the wafer pocket;

discharging a gas present inside the wafer pocket from under the susceptor; and

heating the susceptor and the wafer inside the chamber.

7. A method for producing an epitaxial wafer, comprising the steps of:
- placing a wafer onto a susceptor disposed inside a chamber;
 - supplying a carrier gas containing a raw material gas to above the susceptor inside the chamber and supplying a gas heavier than the carrier gas to under the susceptor; and
 - heating the susceptor and the wafer inside the chamber.